

This listing of claims will replace all prior versions, and listings of claims in this application.

Listing of Claims:

1. (Currently amended) A process for ~~substantially maintaining damage to~~ preventing self-repair of pathogen nucleic acid in a fluid containing pathogens of pathogenic white blood cells, bacteria and/or viruses which may be contained in blood components comprising the steps of:

adding to the ~~fluid blood components~~ a riboflavin photosensitizer ~~comprising riboflavin;~~

irradiating the ~~fluid blood components~~ and riboflavin photosensitizer with light in a visible or UV range at an appropriate wavelength to activate the riboflavin photosensitizer to fragment the nucleic acid of the pathogenic white blood cells, bacteria and/or viruses to cause permanent damage to the ~~pathogen-nucleic acid~~;

preventing self-repair of ~~substantially maintaining the damage to~~ the pathogen nucleic acid; and

wherein the permanent damage to ~~pathogen the~~ nucleic acid caused by the photosensitizer and light is ~~substantially maintained over time such that the pathogenic white blood cells, bacteria and/or viruses will not reproduce in the blood components during storage of the fluid after irradiation.~~

2. (Cancelled)

3. (Cancelled)

4. (Original) The process of claim 1 further comprising adding a quencher to the fluid.

5. (Currently amended) The process of claim 4 wherein the quencher further comprises a quencher selected from the group consisting essentially of glutathione, n-acetyl-cysteine, cysteine, adenine, histidine, tyrosine, tryptophan, ascorbate, vitamin E, trolox, alpha-tocopheral polyethylene glycol succinate (TPGS) and mixtures thereof.

6. (Original) The process of claim 1 further comprising adding to the fluid a solution containing additives to enhance blood component viability.

7. (Original) The process of claim 1 wherein the blood component further comprises platelets.
8. (Withdrawn) The process of claim 1 wherein the blood component further comprises red blood cells.
9. (Original) The process of claim 1 wherein the light used to irradiate the fluid and photosensitizer is in the UVB range.
10. (Currently amended) The process of claim 1 wherein the riboflavin is added to the blood components ~~fluid~~ at a final concentration of between about 50-500 μM .
11. (Withdrawn) A process for inactivating white blood cells which may be contained in a fluid comprising:
 - adding to the fluid containing white blood cells an effective amount of riboflavin;
 - exposing the fluid and riboflavin to light of an appropriate wavelength to activate the riboflavin and cause damage to the nucleic acid of the white blood cells; and
 - substantially maintaining the damage to the nucleic acids of the white blood cells to prevent re-activation of the white blood cells.
12. (Withdrawn) The process of claim 11 wherein the fluid further comprises red blood cells.
13. (Withdrawn) The process of claim 11 wherein the fluid further comprises platelets.
14. (Withdrawn) The process of claim 11 wherein the fluid further comprises plasma.
15. (Withdrawn) The process of claim 11 wherein the light to expose the fluid and riboflavin is in the UVB range.
16. (Withdrawn) The process of claim 11 wherein the riboflavin is added to the fluid at a final concentration of between about 50-500 μM .

17. (Withdrawn) A fluid suitable for transfusing into a patient comprising red blood cells treated by the process of claim 11.

18. (Withdrawn) A fluid suitable for transfusing into a patient comprising platelets treated by the process of claim 11.

19. (Withdrawn) A fluid suitable for transfusing into a patient comprising plasma treated by the process of claim 11.

20. (Cancelled)

21. (Currently amended) A process for providing pathogen reduced ~~fluid-containing~~ blood or blood components suitable for re-infusion into a patient comprising:

damaging the nucleic acid of any pathogenic white blood cells, bacteria or viruses
~~pathogens~~ which may be present with the blood or blood components;

adding riboflavin to the ~~fluid-containing~~ blood or blood components ~~and any pathogens~~;

and

exposing the ~~fluid~~ blood or blood components to UV or visible light to activate the riboflavin to ~~maintain fragment~~ the nucleic acid ~~damage~~ of the pathogenics white blood cells, bacteria or viruses to prevent them from reproducing in the blood or blood component after re-infusion into the patient.

22. (Original) The process of claim 21 wherein the step of exposing the fluid to light further comprises exposing the fluid to light in the UVB range.

23. (Original) The process of claim 21 wherein the riboflavin is added to the fluid at a final concentration of between about 50-500 μ M.